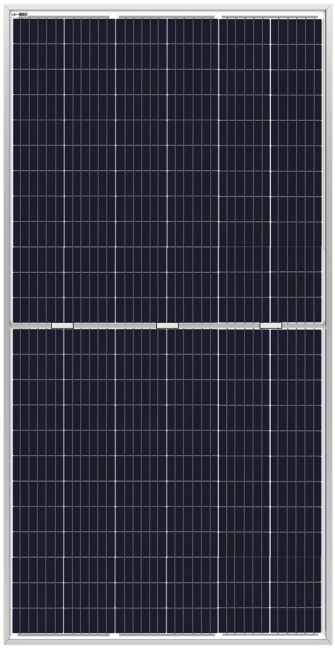
RenewSys®
let there be light

DESERV® Extreme

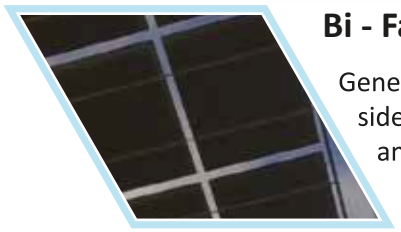
Solar PV Module 395 Wp - 410 Wp

DESERV Extreme is an innovation engineered by combining Bi-Facial and Cut Mono PERC PV Cells. The Bi-Faciality is facilitated by a 'Transparent Backsheet' developed in-house.



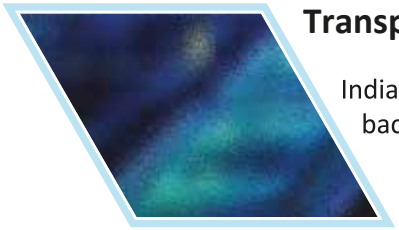
India's most efficient Solar PV Module - **'DESERV Extreme'**.

It delivers a front face output of 410 Wp giving up to 530 Wp @30% Albedo.



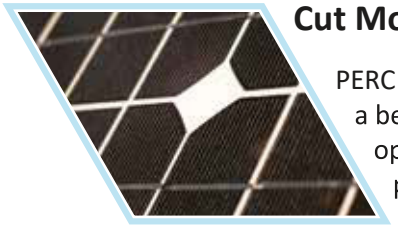
Bi - Facial

Generates power from both sides, hence higher efficiency and power density



Transparent Fluoro Backsheet

India's first transparent fluoro backsheet designed in-house



Cut Mono PERC Cells

PERC Solar PV Cells have a better spectrum operating range and passivation

KEY FEATURES

- Made in India
- Positive power tolerance
- Highly reliable anti- reflective coated glass
- High operating currents and voltages
- More energy per square meter area
- Better performance under shading

IMS Certified Company
(ISO 9001: 2015, OHSAS 45001: 2018 & EMS - ISO 14001: 2015)

Independently Audited by SOLARBUYER

Corporate Office: Unit No. 607, 6th Floor, Trade Center, Bandra-Kurla Complex, Bandra East, Mumbai - 400 051, Maharashtra, India.
Tel.: +91 22 6810 0500

Factory: Plot No.6, Survey # 114/P, Srinagar Village, Maheshwaram Mandal, Dist - Rangareddy, Hyderabad - 501 359, Telangana, India.
Tel.: +91 40 6730 3000

Performance under standard test conditions (1000w/m², AM 1.5, 25 ºC)

DESERV EXTREME	395	400	405	410
Rated power (Pmax), Wp	395	400	405	410
Max. power voltage (Vmp), V	40.24	40.54	40.66	40.75
Max. power current (Imp), A	09.82	09.88	09.97	10.07
Open circuit voltage (Voc), V	48.45	48.57	48.75	48.87
Short circuit current (Isc), A	10.27	10.33	10.41	10.52
Module efficiency (%)	19.40	19.64	19.89	20.13

NOCT (Wp) at 45 ± 2 ºC @800 W/m²				
Pmax (W)	293.97	297.69	301.41	305.13
Max. power voltage (Vmp), V	36.80	37.07	37.18	37.26
Max. power current (Imp), A	07.99	08.04	08.11	08.19
Open circuit voltage (Voc), V	45.05	45.16	45.32	45.44
Short circuit current (Isc), A	08.39	08.43	08.50	08.59

Mechanical Characteristics	
Cable	No. 12 AWG, 4mm²
PV Connectors	MC4 Connectors / MC4 Compatible
Frame	Anodized Aluminum Alloy
Junction box	IP67 Junction box with 4 rail (3 bypass diodes)
Glass	3.2mm Thick low iron tempered

Operating Conditions	
Ambient temperature, ºC	-40 to +85
Max. system voltage, Vdc	1000 or 1500
Hail impact velocity, m/sec	23
Max. surface load capacity, Pa	5400

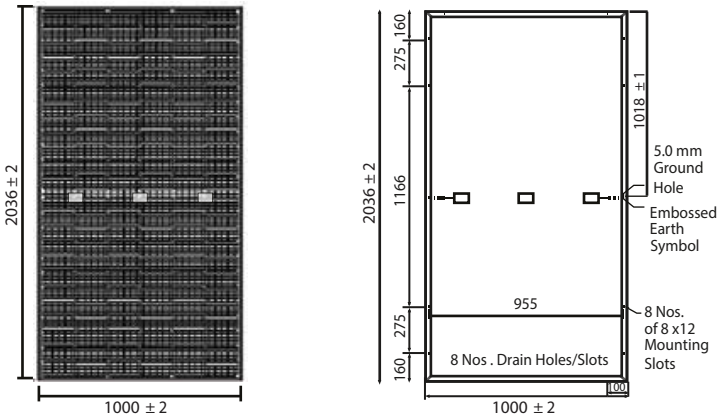
Physical Parameters	
No. of cells	144
Module dimension (mm)	2036 X 1000 (± 2)
Module thickness (mm)	40 or 35
Approximate weight (kg)	22.7 or 22.3

Bi-Facial Gain @Different Albedo (%)

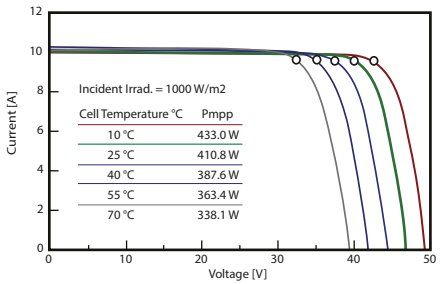
	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)	Pm (Wp)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	Efficiency (%)
Front @STC	**395**	40.24	09.82	48.45	10.27	19.40	**400**	40.54	09.88	48.57	10.33	19.64
5%	414.75	40.24	10.31	48.45	10.78	20.37	420	40.54	10.37	48.57	10.85	20.62
10%	434.50	40.24	10.80	48.45	11.30	21.34	440	40.54	10.87	48.57	11.36	21.61
15%	454.25	40.24	11.29	48.45	11.81	22.31	460	40.54	11.36	48.57	11.88	22.59
20%	474.00	40.24	11.78	48.55	12.32	23.28	480	40.54	11.86	48.67	12.40	23.57
25%	493.75	40.24	12.28	48.55	12.84	24.25	500	40.54	12.35	48.67	12.91	24.55
30%	513.50	40.24	12.77	48.55	13.35	25.22	520	40.54	12.84	48.67	13.43	25.54
Front @STC	**405**	40.66	09.97	48.75	10.41	19.89	**410**	40.75	10.07	48.87	10.52	20.13
5%	425	40.66	10.47	48.75	10.93	20.88	431	40.75	10.57	48.87	11.05	21.14
10%	446	40.66	10.97	48.75	11.45	21.88	451	40.75	11.08	48.87	11.57	22.15
15%	466	40.66	11.47	48.75	11.97	22.87	472	40.75	11.58	48.87	12.10	23.15
20%	486	40.66	11.96	48.85	12.49	23.87	492	40.75	12.08	48.97	12.62	24.16
25%	506	40.66	12.46	48.85	13.01	24.86	513	40.75	12.59	48.97	13.15	25.17
30%	527	40.66	12.96	48.85	13.53	25.86	533	40.75	13.09	48.97	13.68	26.17

Cell Temperature Coefficient	
Open circuit voltage	-0.36 % / ºC
Short circuit current	+0.07 % / ºC
Nominal power	-0.38 % / ºC

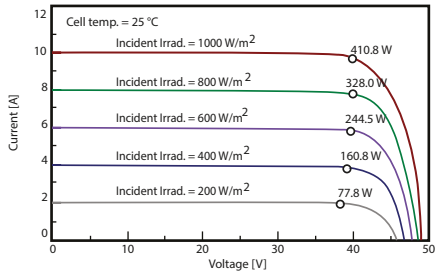
Module dimensions (mm)



I-V Curves - Cell temperature sensitivity chart - 410 Wp



I-V Curves - Incident irradiance sensitivity chart - 410 Wp



*Due to continuous product updation, specifications may change without notice. Kindly refer to the website for latest information: www.renewsysworld.com | renewsys@renewsysindia.com